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RONALD M. ANDERSON MICROSOFT CORPORATION 600 108TH AVENUE N.E., SUITE 507 BELLEVUE, WA 98004			WOZNIAK, JAMES S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/020,343	BERGSTRAESSER ET AL.
	Examiner James S. Wozniak	Art Unit 2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 31 July 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 and 16-45 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-14 and 16-45 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 10 December 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the office action from 2/22/2006, the applicant has submitted a request for continued examination and a supplementary amendment, filed 6/21/2006 and 7/31/2006, respectively, amending claims 1 and 14, while arguing to traverse the art rejection based on the limitation regarding the comparison of a linguistic component to a tag and carrying out an action in a document that is associated with a matching tag (*Amendment, Pages 15-17*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in view of Jokela et al (U.S. Patent Publication: 2002/0184247) and Allen et al (U.S. Patent: 6,026,410).

2. Due to the claim 14 amendment and the cancellation of claim 15, the examiner has withdrawn the previous claim objections directed toward an improper dependent claim form.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 39-43** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claim 39**, the phrase "and other metadata" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "and other metadata"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05 (b and d).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 39-44** are rejected under 35 U.S.C. 102(e) as being anticipated by Jokela et al (*U.S. Patent Publication: 2002/0184247*).

With respect to **Claim 39**, Jokela discloses:

Creating a dictionary that includes linguistic constructs and other metadata relating to natural text that can be entered by a user to activate tags from within the

document (*database of commands and descriptions that would inherently require some type of creation step, Paragraphs 0016 and 0021*);

In respect to a template from which the document is produced, associating an action with each tag that can thus be activated (*associating a command with a data block based on a particular spreadsheet application, Paragraphs 0017-0018 and 0021-0023*);

Storing the tags and actions associated with the tags for the template in a catalog that is maintained at a site centrally accessible over a network by each of a plurality of users (*aggregator database, Paragraph 0016; and multiple user access, Paragraph 0026*);

Enabling any of the plurality of users to produce the document based upon the template, using a productivity software application (*spreadsheet creation using predetermined spreadsheet applications, Paragraphs 0022-0025*); and

Providing the dictionary, and the tags and the actions associated with the tags in respect to the template to a user who is working on the document in the productivity software application, to enable the text entered by the user to be recognized as corresponding to one of the tags, so that the action associated with said one of the tags is carried out in the document based on the template, the template being associated with both the document and said one of the tags (*providing network access to the aggregator, Paragraph 0021; and spreadsheet creation using predetermined spreadsheet applications, Paragraphs 0022-0025*).

With respect to **Claim 40**, Jokela discloses:

Employing the linguistic constructs and other metadata in the dictionary to recognize text entered by the user as corresponding to at least one tag (*Paragraphs 0020-0022*).

With respect to **Claim 41**, Jokela further recites:

At least one linguistic component corresponds to a subset of the plurality of tags, said subset including at least two tags, further comprising the step of displaying each tag in the subset to the user to enable the user to select the tag corresponding to the linguistic component, so that the tag action associated with the tag selected by the user is carried out (*smart tag menu display and selection of a desired tag, Paragraphs 0020-0021*).

With respect to **Claim 42**, Jokela further recites:

Determining a user dependent context as a function of an identity of a current user of the application (*identifying an individual user that has been enabled by an external source, through an agreement or subscription, to access smart tag data, Paragraphs 0015 and 0019*); and

Enabling only specific tags to be accessible by the current user as a function of the user dependent context (*allowing smart tag data access for approved users, Paragraphs 0015 and 0019*).

With respect to **Claim 43**, Jokela further recites:

A memory medium having machine-readable instructions for carrying out the steps of claim 39 (*computer program stored in a computer memory, Paragraph 0015*).

With respect to **Claim 44**, Jokela discloses:

A memory in which machine instructions and data are stored, said data including a plurality of tags and actions associated with the tags in regard to a template on which the document is based (*aggregator and associated database for storing tags and commands associated with a particular spreadsheet application, Paragraphs 0015-0016*);

A network interface that communicates with a plurality of remote computing devices over a network (*network connection, Paragraph 0014*);

A processing device that is coupled in communication with the memory and the network interface, said processing device executing the machine instructions stored in the memory to carry out a plurality of functions (*aggregator, paragraph 0015*), including:

(i) Enabling the tags and actions associated with the tags to be centrally maintained (*aggregator database and updating means, Paragraphs 0016 and 0018*); and

(ii) Enabling any of a plurality of remote computing devices to access and download the tags and actions associated with the tags over a network for use in carrying out the action associated with any tag that corresponds to text entered in the document (*transmitting tags and actions corresponding to a user's spreadsheet command, Paragraph 0021; and multiple user access, Paragraph 0026*).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-4, 6-7, and 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela et al (*U.S. Patent Publication: 2002/0184247*) in view of Allen et al (*U.S. Patent: 6,026,410*).

With respect to **Claim 1**, Jokela discloses:

Receiving a text entry made by a user in the document to identify at least one linguistic component of the text entry (*entering text into a spreadsheet application document, Paragraph 0021*);

Providing a plurality of tags, each of the plurality of tags having an action associated with it (*smart tags having associated resource actions, Paragraph 0020*);

Comparing said at least one linguistic component to the plurality of tags to determine at least one tag that corresponds to each text entry (*comparing entered text to smart tags to retrieve corresponding tags, Paragraph 0021*); and

Automatically carrying out the tag action associated with said at least one tag, wherein the tag action exhibits at least one behavior in the document that is based on at least one member of a group consisting of a template and a schema associated with both the tag and the document (*retrieving and displaying a menu of smart tags and*

associated descriptions or automatically entering tag data in a new or programmed spreadsheet or other application document, Paragraphs 21-22, 24, and 26).

Jokela does not specifically disclose parsing a text entry made by a user in a document to identify at least one linguistic component of the text entry, however Allen recites a method and system for carrying out an action in a document associated with a keyword that parses a natural language text input from a user for keyword identification (Col. 5, Line 57- Col. 6, Line 11).

Jokela and Allen are analogous art because they are from a similar field of endeavor in text command systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela with the parsing means taught by Allen in order to implement a more efficient data entry means that allows a user to input commands in free form (Allen, Col. 2, Lines 6-8; and Col. 9, Lines 9-12).

With respect to **Claim 2**, Jokela further recites:

At least one linguistic component corresponds to a subset of the plurality of tags, said subset including at least two tags, further comprising the step of displaying each tag in the subset to the user to enable the user to select the tag corresponding to the linguistic component, so that the tag action associated with the tag selected by the user is carried out (*smart tag menu display and selection of a desired tag, Paragraphs 0020-0021*).

With respect to **Claim 3**, Jokela further recites:

Determining a user dependent context as a function of an identity of a current user of the application (*identifying an individual user that has been enabled by an external source, through an agreement or subscription, to access smart tag data, Paragraphs 0015 and 0019*); and

Enabling only specific tags to be accessible by the current user as a function of the user dependent context (*allowing smart tag data access for approved users, Paragraphs 0015 and 0019*).

With respect to **Claim 4**, Jokela further recites:

Determining a use dependent context as a function of a current use of the document (*determining application-specific data, Paragraphs 0024-0025*); and

Enabling only specific tags to be accessible by the current user as a function of the use dependent context (*allowing access to specific application tags based on a document application, Paragraphs 0024-0025*).

With respect to **Claim 6**, Jokela further recites:

The document comprises a predefined schema in which specific regions of the document are associated with a predefined group of tags (*programmed spreadsheet document, Paragraph 0024*).

With respect to **Claim 7**, Jokela further recites:

An action associated with a tag provides input to another region of the predefined schema (*data block chain, Paragraph 0022*).

With respect to **Claim 11**, Jokela further recites:

The document is opened in the application on a client computing device and steps (b) and (c) are carried out on a server computing device (*aggregator computer, Paragraph 0017; and Fig. 1*).

With respect to **Claim 12**, Jokela further recites:

The tags and actions associated therewith are maintained in a catalog on a server that is accessed by each of a plurality of users over a network (*aggregator database, Paragraph 0016; and multiple user access, Paragraph 0026*).

With respect to **Claim 13**, Jokela further recites:

Determining whether a location in the document in which the user has just entered text is associated with any of the plurality of tags (*data block identifier, Paragraph 0016*).

With respect to **Claim 14**, Jokela further recites:

A memory medium having machine-readable instructions for carrying out the steps of claim 1 (*computer program stored in a computer memory, Paragraph 0015*).

9. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela et al in view of Allen et al and further in view of de Hita et al (*U.S. Patent: 6,081,774*).

With respect to **Claim 5**, Jokela in view of Allen teaches the text parsing and tag identification method as applied to Claim 1. Jokela in view of Allen does not specifically suggest specifying synonyms and linguistic annotations for a tag, however de Hita discloses a dictionary creation means for associating semantic (*synonym*) and syntactic data with a tag (*token*) (*Col. 3, Lines 1-20; and Col. 11, Lines 8-56*).

Jokela, Allen, and de Hita are analogous art because they are from a similar field of endeavor in information retrieval systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela in view of Allen with the dictionary creation means taught by de Hita in order to ensure proper representation of a text's content (*de Hita, Col. 2, Lines 9-20*).

10. **Claims 8-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela et al in view of Allen et al and further in view of Budzinski et al (*U.S. Patent: 5,715,468*).

With respect to **Claim 8**, Jokela in view of Allen teaches the text parsing and tag identification method as applied to Claim 1. Jokela in view of Allen does not specifically suggest a parsing operation that produces a normalized tree of the text entry, however, Budzinski discloses a natural language parsing method that creates a parse tree of an input text for dictionary comparison (*Col. 4, Line 60- Col. 5, Line 22; and Col. 33, Lines 17-51*).

Jokela, Allen, and Budzinski are analogous art because they are from a similar field of endeavor in text data processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela in view of Allen with the parsing method taught by Budzinski in order to implement improved natural language processing by further analyzing the role of a word within an input text through the use of a parsing tree (*Budzinski, Col. 20, Lines 12-17*).

With respect to **Claim 9**, Jokela further discloses presenting multiple tags to a user for selection, as applied to Claim 2.

11. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela in view of Allen et al and further in view of Goldberg et al (*U.S. Patent: 6,598,046*).

With respect to **Claim 10**, Jokela in view of Allen teaches the text parsing and tag identification method as applied to Claim 1. Jokela in view of Allen does not specifically teach providing tag access based upon a user's role, however Goldberg discloses document tags that are only accessible based on a user role (*Col. 4, Line 56- Col. 5, Line 38*).

Jokela, Allen, and Goldberg are analogous art because they are from a similar field of endeavor in text data processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela in view of Allen with the user specific document tags as taught by Goldberg in order to implement a means for document retrieval that aligns more closely with the needs and strategies of an individual user (*Goldberg, Col. 2, Lines 31-43*).

12. **Claims 16-21, 23, 26-33, and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela et al in view of Kanaegami et al (*U.S. Patent: 5,297,039*).

With respect to **Claim 16**, Jokela discloses:

Receiving a text entry made by a user in the document to identify at least one linguistic component of the text entry (*entering text into a spreadsheet application document, Paragraph 0021*);

Providing a plurality of tags, each of the plurality of tags having an action associated with it (*smart tags having associated resource actions, Paragraph 0020*);

Comparing said at least one linguistic component to the plurality of tags to determine at least one tag that corresponds to each text entry and returning a matching instance (*comparing entered text to smart tags to retrieve corresponding tags, Paragraph 0021*); and

Automatically carrying out the tag action associated with said at least one tag, wherein the tag action exhibits at least one behavior in the document that is based on at least one member of a group consisting of a template and a schema associated with both the tag and the document (*retrieving and displaying a menu of smart tags and associated descriptions or automatically entering tag data in a new or programmed spreadsheet or other application document, Paragraphs 21-22, 24, and 26*).

Jokela does not specifically disclose text parsing and identifying synonyms of parsed text, however Kanaegami discloses a method for parsing input text to identify keywords and phrases (Col. 21, Lines 40-60) and a means for identifying synonyms of input text (Col. 15, Line 55- Col. 16, Line 24; Col. 26, Lines 11-37).

Jokela and Kanaegami are analogous art because they are from a similar field of endeavor in document retrieval applications utilizing text parsing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify

the teachings of Jokela with the synonym searching means as taught by Kanaegami in order to ensure no relative terms are overlooked when performing a dictionary matching (*Kanaegami, Col. 1, Lines 48-53*).

Claim 17 contains subject matter similar to claim 2, and thus, is rejected for the same reasons.

With respect to **Claim 18**, Jokela further recites:

The action associated with the instance that is returned causes an entry to be made in the document that is related to the text entry by the user (*inserting data into a spreadsheet that is associated with a user text entry, Paragraphs 0021-0023*).

Claim 19 contains subject matter similar to claim 3, and thus, is rejected for the same reasons.

Claim 20 contains subject matter similar to claim 4, and thus, is rejected for the same reasons.

With respect to **Claim 21**, Jokela discloses:

The document is derived from a schema with which the dictionary is associated (*programmed spreadsheets associated with a tag database, Paragraphs 0022 and 0024*).

With respect to **Claim 23**, Jokela discloses:

The instance is associated with a description, further comprising the step of displaying the description to the user to enable the user to confirm the instance, prior to implementing the action associated with the instance (*retrieving a data block description, Paragraph 0021*).

Claim 26 contains subject matter similar to claim 12, and thus, is rejected for the same reasons.

Claim 27 contains subject matter similar to claim 14, and thus, is rejected for the same reasons.

Claim 28 contains subject matter similar to claim 16, and thus, is rejected for the same reasons. Also Jokela further discloses a user's computer system and aggregator system (*Fig. 1, Elements 20 and 50*), a spreadsheet display (*Fig. 3*), and a typing means for text data entry (*Paragraph 0022*).

Claims 29-33 contains subject matter similar to claim 17-21, respectively, and thus, are rejected for the same reasons.

Claim 35 contains subject matter similar to Claim 23, and thus, is rejected for the same reasons.

13. **Claims 22, 25, 34, and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela et al in view of Kanaegami et al, and further in view of Budzinski et al.

With respect to **Claims 22 and 34**, Jokela in view of Kanaegami teaches the text parsing and tag identification method and system as applied to Claims 16 and 28. Jokela in view of Kanaegami does not specifically disclose the use of natural language grammar rules in parsing, however, Budzinski discloses parsing trees as applied to Claim 8, having grammatical rules (*Col. 33, Lines 17-51*).

Jokela, Kanaegami, and Budzinski are analogous art because they are from a similar field of endeavor in text data processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela in view of Kanaegami with the parsing method taught by Budzinski in order to implement improved natural language processing by further analyzing the role of a word within an input text through the use of a parsing tree (*Budzinski, Col. 20, Lines 12-17*).

Claims 25 and 37 contain subject matter similar to Claim 8, and thus, are rejected for the same reasons.

14. **Claims 24, 36, and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela et al in view of Kanaegami et al, and further in view of Allen et al.

With respect to **Claims 24 and 36**, Jokela in view of Kanaegami teaches the text parsing and tag identification method and system as applied to Claims 16 and 28. Jokela in view of Kanaegami does not specifically disclose the ability of a user to create a dictionary, however Allen discloses:

Enabling the user to add additional words and phrases associated with specific instances to the dictionary to create a user lexicon (*Col. 12, Lines 21-24*).

Jokela, Kanaegami, and Allen are analogous art because they are from a similar field of endeavor in text data processing. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela in view of Kanaegami with the dictionary creation means taught by Allen in order to

implement a more efficient data entry method that allows a user to input commands in free form (*Allen, Col. 2, Lines 6-8; and Col. 9, Lines 9-12*).

Claim 38 contains subject matter similar to Claim 26, and thus, is rejected for the same reasons. Allen also teaches the use of HTML for displaying text (*Col. 30, Lines 44-53*).

15. **Claim 45** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jokela in view of Fukao et al (*U.S. Patent: 5,323,311*).

With respect to **Claim 45**, Jokela discloses the spreadsheet action tag retrieval system as applied to Claim 44. Jokela further teaches a tag database (dictionary containing words and other linguistic units (*abbreviation symbols, numerical data, etc, Paragraphs 0016 and 0022*)). Jokela does not specifically suggest the ability to download a dictionary at a client device, however Fukao teaches such an implementation (*Col. 9, Lines 45-51*).

Jokela and Fukao are analogous art because they are from a similar field of endeavor in text processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Jokela with the dictionary transfer means as taught by Fukao in order to allow multiple user terminals to share dictionary data (*Fukao, Col. 9, Lines 45-51*).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Storisteanu et al (*U.S. Patent: 6,976,209*)- teaches a means for linking parsed text to a command or macro.

Frederick (*U.S. Patent Publication: 2003/0004830*)- teaches a data input method that utilizes a tag corresponding to a text command to fill in a shipping form spreadsheet.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached at (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
10/3/2006

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